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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,432	11/19/2003	Makoto Miyake	60188-709	5345

7590 08/23/2006

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EXAMINER	
CRIBBS, MALCOLM D	

ART UNIT	PAPER NUMBER
2115	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/715,432	MIYAKE ET AL.	
	Examiner	Art Unit	
	Malcolm D. Cribbs	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-7* is/are rejected.

7)☒ Claim(s) *4* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

Claims 1-7 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, and 5-7 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art [AAPA] in view of Suzuki [US Patent No. 6,256,520].

As per claims 1, and 2, AAPA teaches the invention comprising:

a data communication apparatus for data communication via cables [Page 1 lines 11-15].

AAPA does not teach the process of detecting a drop in power supply. Specifically, AAPA teaches the process of stopping communication upon detecting a malfunction cause from a halting of power supply voltage. However, AAPA fails to detail what happens to the data being sent to a receiver with no power during a

malfunction. A routineer in the art would have been motivated to look for a teaching for the possible handling of the data being sent during a malfunction state.

Suzuki teaches another method of data transmission wherein the data being sent during a stopped communication state is stored in RAM. In addition, Suzuki teaches a voltage detection section [Fig. 2 section 4] for outputting a signal to a control section [Fig. 2 section 8] to stop data communication based on a voltage drop [Col 3 lines 35-40 and Col 5 lines 25-28]. In summary, Suzuki teaches a method of for storing data sent during a stopped communication period, based on a detected voltage drop, instead of loosing the data sent during the malfunction period.

It would have been obvious to one of ordinary skill in the art to combine the teachings of AAPA and Suzuki, which are analogous art, because the both teach a method of communicating data and detecting a voltage drop. Suzuki covers the deficiency of AAPA by teaching the detail of stopping communication when a voltage drop is detected.

As per claim 3, AAPA teaches a common-mode potential setting circuit for setting a common-mode potential of a differential signal to initiate communication at the cables. It would have been obvious to one of ordinary skill in the art to set the potential to ground therefore stopping communication, as opposed to initiating communication.

As per claims 5-6, Suzuki teaches the claimed invention [Figs 2, 3, and 4; Col 5 lines 25-28; Col 7 lines 9-16].

As per claim 7, it is directed to the method of steps to implement the apparatus as set forth in claims 1-6. Therefore it is rejected for the same basis as set forth hereinabove. It would have been obvious to of ordinary skill in the art to halt communication of cables by decreasing the potential at the cables.

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed on June 7, 2006 have been fully considered but they are not persuasive. Specifically, the applicant substantially argued to the point that Suzuki fails to disclose detecting a drop in a power supply voltage supplied to the drop detecting circuit itself. In response to the applicant's argument that Suzuki fails to disclose detecting a drop in a power supply voltage supplied to the drop detecting circuit itself, the examiner disagrees. Further, the examiner agrees that does not **explicitly** disclose detecting the voltage supplied to the drop detecting circuit itself. However, one of ordinary skill in the art would consider that the voltage detection circuit taught by

Suzuki monitors the voltage coming into the detection section, voltage supplies to itself, in route to the control section. Therefore, as taught by Suzuki, the voltage detection circuit detects a drop in voltage supplied to itself, the voltage detection section.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malcolm D. Cribbs whose telephone number is 571-272-5689. The examiner can normally be reached on M-F 8AM-430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Malcolm D Cribbs
Examiner
Art Unit 2115

August 17, 2006

THOMAS
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TECHNOLOGY